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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,656	11/24/2006	Toru Masatomi	71,051-026	6287
27305	7590	02/12/2010		
HOWARD & HOWARD ATTORNEYS PLLC			EXAMINER	
450 West Fourth Street			PENG, KUO LIANG	
Royal Oak, MI 48067				
		ART UNIT	PAPER NUMBER	
		1796		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/562,656

Applicant(s)

MASATOMI ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/30/09 Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. The Applicants' amendment filed November 30, 2009 is acknowledged. Claims 1, 5 and 12-13 are amended. Now, Claims 1-21 are pending.
2. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 20090801) is/are removed.
3. Claim rejection(s) under 35 USC 102 and 102/103 in paragraphs 5 and 8 of the previous Office Action (Paper No. 20090801) is/are removed.
4. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

Claim Rejections - 35 USC § 112

5. Claims 1-21 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

the inventor(s), at the time the application was filed, had possession of the claimed invention.

In Claim 1 (line 14), Examiner is not able to find the basis for "alkylmethacrylate".

Claim Rejections - 35 USC § 102 and 103

6. Claims 1-6, 8-14, 16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP765 (JP 10-101765).

For Claims 1-6, 8-14, 16 and 18-21, JP765 discloses a composition comprising a vinyl polymer derived from a monomer mixture containing vinyl monomer represented by formula (a) where R^1 can be methacryloxypropyl group, n is 0 and m is 3, γ -(meth)acryloxypropyltrimethoxysilane, etc., and alkyl (meth)acrylates in the presence of an azo-based initiator; a condensation catalyst such as an organotitanium compound, an organoaluminum compound, etc.; a solvent; and alkoxyasilanes such as γ -aminopropyltri(m)ethoxysilane, etc. ([0006], [0012]-[0029]-[0033], [0050], [0052]-[0054] and Examples) Since the alkoxyasilanes read on the claimed coupling agents, Examiner has reasonable basis to believe that JP765's alkoxyasilanes can function as

coupling agents. JP675 further teaches the use of vinyl monomer such as methylacrylate, etc. in an amount of from 20-90 wt%. ([0028]-[0029]) As Applicants noted in Remarks (page 8, 2nd paragraph to page 9, 1st paragraph), the amount of hydrolyzable silyl-containing monomer can be up to 25 wt%, or less preferably up to below 30 wt%. ([0024]) As such, the vinyl monomer can be used in an amount of from 80 to 360 parts by weight (or less preferably from 60 to 270 parts by weight) based on 100 parts of the hydrolyzable silyl-containing monomer. As such, JP675 discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a *prima facie* case of obviousness. *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). For Claims 7, 15 and 17, JP675 is silent on the pencil hardness of the cured coating film. However, JP675's composition is substantially similar to the claimed one, Examiner has reasonable basis to believe both should possess similar properties including the pencil hardness.

For Applicants' argument (Remarks, page 7, 2nd paragraph to page 8, 1st paragraph), JP675 teaches the use of vinyl monomer such as methylacrylate, etc., *supra*. In addition, arguing the presence of the

hydroxy-containing monomer in JP675's disclosure is immaterial because it is not commensurate with the scopes of the claimed invention.

For Applicants' argument (Remarks, page 8, last paragraph bridging to page 9, 1st paragraph), JP675 discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a *prima facie* case of obviousness, *supra*.

7. Claims 1-2, 5-6, 8-9, 12-14, 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by JP668 (JP 04-103668).

JP668 discloses a composition comprising a polymer derived from a monomer mixture containing monomers (a)-(e). Monomer (a) can be γ -(meth)acryloxypropyltrimethoxysilane, etc., optionally (meth)acryloxyalkyl tris(trialkylsiloxy)silane, Monomer e) can be an alkyl (meth)acrylate. Monomer d) can be (meth)acryloxypropyl tris(trimethylsiloxy)silane in the presence of an azo-based initiator. (page 3, upper left column to lower left column, page 5, upper left column, page 6, lower columns, page 7, lower right column and Examples) A curing catalyst such as aluminum, titanium or zirconium compound and a solvent can be employed. (page 7, upper right column and page 8, all columns) The amounts of the monomers

corresponding to the claimed ones are further illustrated in the method for preparing copolymer solution A. (page 9, upper right to lower left column)

For Applicants' argument (Remarks, page 9, 2nd and 3rd paragraphs), JP668 discloses (meth)acrylate, etc., *supra*. In addition, arguing the presence of the hydroxy-containing monomer and epoxy-containing monomer in JP668's disclosure is immaterial because it is not commensurate with the scopes of the claimed invention.

8. Claims 7, 15 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP668.

JP668 discloses a composition, *supra*, which is incorporated herein by reference. JP668 is silent on the pencil hardness of the cured coating film. However, since the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

For Applicants' argument (Remarks, page 9, last paragraph bridging to page 10, 1st paragraph), Examiner's position set forth in paragraph 9 above is applicable here.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1796

klp

February 2, 2010

/Kuo-Liang Peng/

Primary Examiner, Art Unit 1796